

Plug-In To eCycling

Event Tool Kit

This *Plug-In To eCycling* Tool Kit is a guide for planning recycling collection events for consumer electronics. The Tool Kit is for use primarily by local governments, not-for-profit organizations, retailers or other interested groups (such as computer users groups or clubs) that are considering hosting electronics recycling events.

This Tool Kit is intended to provide users with easy-to-act-on information, and is not an exhaustive discussion of the topic. For additional resources to help plan and implement recycling events, please see:

- Setting Up & Operating Electronics Recycling/Reuse Programs: a Manual for Municipalities and Counties, Northeast Recycling Council, www.nerc.org/adobe/ survey/index.html
- Organizing a One-Day Computer
 Equipment Recycling Event: a Planning
 Guide, U.S. EPA Region VIII, Colorado
 Governor's Office on Energy Management
 and Conservation, EcoCycle, Inc.,
 www.ecocycle.org/programs/
 organizecompevent.cfm



Plug-In To eCycling Event Tool Kit

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- 2. Report to the Public
- 3. Send Results To EPA *Plug-In To eCycling* Campaign



First Steps in Planning Your Event

1. Initial Planning

etc.)?

BEFORE initiating other planning details.

Here are your initial questions as you begin to plan an electronics collection event.

□ What type of event will you hold?
 □ When will you hold the event?
 □ What event tasks can you carry out and what tasks will you need to contract for services?
 □ How much will the event cost you?
 □ How will you pay for the event, or get others to help you?
 □ What is the schedule for event preparation?
 □ What will be your measure of success for the event (e.g., quantity of material, number of participants,

This Tool Kit includes a planning guide to help create a schedule leading into the event. A three-month time frame should allow you to plan and coordinate a smooth event. Local government decision-making processes can sometimes add to the time needed at the beginning of your planning process. If you are working in partnership with others, some planning time should be devoted to sorting out roles and responsibilities, including funding,

2. How to Choose the Right Electronics Recycling Activity

As stated above, this Tool Kit is designed to help plan electronics recycling events, as part of the EPA *Plug-In To eCycling* campaign. Local governments, charitable organizations and private companies have used a range of approaches to collect consumer electronics over the past 10 years. Some of the options available for collecting electronics for recycling are listed below.

Host a drop-off event – one-time or periodic – focused on just consumer electronics
Add consumer electronics to an existing household hazardous waste drop-off event, such as a spring/fall
cleanup day
Allow for ongoing, permanent drop-off at existing recycling, solid waste transfer or household hazardous
waste facilities
Provide curbside pick-up of electronics
Partner with local retail stores to provide collection services through ongoing drop-off at stores or repair
and reuse outlets
Create a mail-back program - usually sponsored by product manufacturer, others could do this as well -
that enables citizens to ship old products to recycling centers

3. Budget and Funding

What does an event cost?

An electronics recycling event has four basic costs centers.

Public education and outreach – how you publicize the event
 Operations costs – costs include labor, equipment and supplies, and perhaps site rental
 Transportation costs – costs for transportation to processing facilities, usually billed per mile/hour, including driver labor charges and shipping supplies
 Recycling costs – costs to break products down into component parts and actual recycling process costs

As you consider the budget for your event(s), remember that costs can vary considerably, depending on the:

☐ Type of program or event you hold;

- ☐ Publicity you use and the cost of that publicity in your market;
- ☐ Amount and type of material you recycle;
- ☐ Market price of environmentally responsible electronics recycling in your area; and
- ☐ Labor, transportation and equipment costs in your area.

Your ability to make use of donated time or resources – labor, equipment, advertising or site access – can have a significant impact on your event costs.

Two localities that started electronics recycling in 2001 demonstrate how the type of event, advertising and other factors can affect participation and cost for electronics recycling programs.

The cost to recycle material at an electronics only collection event can range from \$5,000 to \$16,500, based on a recent study by Portland Metro. This range reflects an event that collects on average 15 tons, or 30,000 pounds. These costs include event labor, equipment and recycling, but not advertising or promotion.

[Source: Assessment of E-Waste Collection & Processing Issues for the Metro Region, June 2002.]

The costs for advertising an electronics collection event can range from no additional cost, when governments advertise the events in existing recycling newsletters or mailings, to over \$40,000 in a major media market where organizers use paid advertising on television and in newspapers.

[Source: Interviews with recycling staff in Minnesota, California, Florida, Maryland.]

- □ Napa County, California, a mostly rural county of about 128,000 people, conducted a Friday/Saturday recycling event in 2002 that collected 85 tons of electronics for recycling. In addition, another 15 tons were received through a year-round drop-off service. Every resident received notice of the event in their monthly garbage bill and recycling was free for residents and businesses. They used their franchise garbage hauler and the Napa Valley Personal Computer Users Group to plan and carry out the two-day event. The total event cost, including public outreach and advertising, labor, transportation, equipment and recycling, was about \$50,000.
- □ Lakeville, Minnesota, a Minneapolis-St. Paul suburb of 43,000, added electronics to their Household Hazardous Waste Collection Day and collected 14.5 tons of material during the first event. The event was publicized in the Lakeville newspaper, using already-budgeted space for the HHW collection. Notices were put on the city website and cable access channel, and fliers were distributed to the schools and sent home with children. The service was limited to city residents, and they were charged \$20 for large televisions or monitors (over 20 inches) and \$10 for televisions or monitors less than 10 inches. Other electronic items were collected at a charge of \$2 per item. They used city and volunteer labor, and contracted with a recycling company for transportation and recycling. The electronics recycling cost, above and beyond what was covered by the fees collected from participants, was about \$7,000.

How to pay for the event

Nearly all types of programs have a variety of funding options. Cities, counties and private entities have used some or a combination of these options.

Charge a fee for those that drop off items at an event, which could cover all or part of the actual
recycling, collection and transportation costs
Use government funds (from property tax, waste or recycling fee revenue) to cover all or part of costs
Have a private sector source cover all or part of the cost of a program
Use in-kind contributions from government and private sources to cover costs (publicity, labor,
equipment)

When combined, these options represent a shared responsibility model for electronics recycling, in which manufacturers, retailers, consumers and communities all share in the cost. With this Plug-In To eCycling campaign, the EPA hopes to encourage more partnerships and increased opportunities for recycling.

Paying for an event - Examples of Public/Private Partnerships

The eCycling Project, established by the EPA, created a vehicle for ten electronics manufacturers to provide grant funding through the Electronics Industries Alliance to fund electronics recycling in the EPA Region III area. Region III states (Delaware, the District of Columbia, Maryland, Pennsylvania, Virginia and West Virginia) provided limited funding, largely through in-kind services. Local governments provided advertising for the events, and some jurisdictions paid for processing and transportation costs, in part or full. In addition, some events were held at retail locations. Three manufacturers, SONY, Sharp and Panasonic, paid the cost of recycling their products collected at the events.

In some other areas (Connecticut, Minnesota) SONY, Sharp and Panasonic have agreed to pay recycling costs for their products. The arrangements vary by area, Governments have chosen to cover the additional costs for collection and transportation either through existing government garbage and recycling fees, or by charging recycling participants a drop-off fee.

User fees have varied considerably across the Country. Generally, user fees are charged only on products containing Cathode Ray Tubes (CRTs), such as televisions and computer monitors, but some areas charge for all items. Each issue of *E-Scrap News* lists fees charged at recent collection events.

In 2002, user fees as low as 75 cents per television and 25 cents
per monitor were charged in rural Allegany County, Maryland.
The County charged an amount to cover only advertising costs.
Other event costs were covered through the eCycling Project
established by EPA Region III.

☐ User fees of \$10 to \$35 per television or monitor have been charged in a number of areas, such as drop-off options at landfills

and waste transfer stations, and by private mail-back programs run by Hewlett Packard, IBM and Dell. Snohomish County, Washington, provides a good example of the range of fees charged for electronic items. See www.co.snohomish.wa.us/publicwk/solidwaste/programs/takeitback/NCRTS.htm.

☐ Best Buy has charged \$10 per monitor and \$15 per television at most of its recycling events. All other electronic items are accepted at no charge. In the Seattle area, where transportation costs are very high due to the distance to facilities that can process the full spectrum of electronic products collected at events, the retailer has added on a \$5 per car fee.

Examples of User Fees

- Flat fee per participant or car
- Fee per item (usually on televisions & monitors)
- ✓ Fee per pound for each item

4. Timeline and Schedule

This basic timeline will help you develop a schedule and keep in mind all of the activities that must be done during your event planning. If your event represents a partnership – among a group of cities, a city-county combination, or between business, nonprofit and a government office – the schedule you develop may require additional time to allow for needed cooperation.

Three Months Before the Event

	Logistics and Planning Determine type of event, participants (residents, businesses), and dates and times
	Seek partner commitments to support event
	Decide which items you will collect List specific collection, sorting, processing activities needed for the event Determine activities you will carry out and activities you will hire a service provider to do Check existing electronics recycling in your area to see if you can collaborate Select location(s); begin process of obtaining permission for recycling, if necessary
Other I	Details Research permit requirements, including OSHA, local waste enforcement and traffic
	ty and Advertising Determine type of publicity you will use [See www.plugintorecycling.org for free outreach and education tools you can use for your event]
Two N	Months Before the Event
	Logistics and Planning Finalize site location choice and ensure all necessary permission is in place
-	ling Details Select recycler and confirm dates, times and services. Initiate work on a service contract
Other L	Details Arrange any additional recycling services – batteries, cardboard or paper recycling
	ty and Advertising Finalize details of publicity and advertising materials (locations, times, dates) Send out notices and information with long lead times (newsletters, bill inserts) Create on-site signs or handouts to those recycling participants
One N	Month Before the Event
-	Confirm data collection needs for measurement and reporting Recruit volunteer staff, if necessary, and provide guidance on event (e.g., what to wear, traffic control, hours, etc.)
Other L	Oetails Arrange for all necessary equipment not provided by the recycler Confirm insurance coverage is in place Contact local police department and traffic control authorities, as necessary

First Steps in Planning Your Event

One W	eek Before the Event							
	ng Details Reconfirm all staffing, equipment, recycling service arrangements							
	Details Ensure event staff have access to water and rest rooms Make arrangements for collecting fees, if necessary (staff, petty cash, security) Get supplies – traffic cones, tape, tools, refreshments							
	y and Advertising Send out press release and contact local reporters several days before event							
<u> </u>	Follow up on advertising and promotions, contact local news outlets Prepare site early with recycling service provider and other on-site staff Re-connect with property management before event begins; exchange contact information and establish protocol for addressing unexpected issues							
	Hold press conference, answer any press questions Coordinate and manage on-site staff							
	Greet participants and interested constituents or supporters							
	Collect data, including any survey information, in order to document your event to help with future funding and support							



Tasks to Complete Before the Event

Once you've made the decision to hold a recycling collection event and have developed a project budget, there are a number of specific elements to address leading up to the event

1. Pick the Location for Your Event

Your location decision should address several factors:

- ☐ The location should be reasonably well known in the community, or at least fairly convenient to people you want to participate.
- ☐ The site should have good street access, so people can easily enter the site without creating backups or delays. Avoid sites that have only one point of entry, or require people to make left turns on busy streets.
- □ The space or parking lot should be large enough to safely accommodate traffic, recycling equipment and event staff. There are a number of ways to set up for an event, but a large space is needed to ensure that things run smoothly. If you are working in a parking lot, look for areas where you can get about 4,000 square feet. This space should be situated so that you can create two lines for cars, one on each side, or a single line that has space for workers to unload a number of cars at the same time, to help to minimize waiting time.

2. Get Permission to Hold the Event

Early approval for an event should be a top priority in your planning efforts. Delays in approval can mean fewer widespread publicity opportunities due to compressed time lines, thus lowering the turnout and the overall success of the event.

Establish good communications with the property owner, occupant or manager. Provide them with good information about the event and what to expect.

- ☐ Identify who will be the person to "make the call" for using a site. For example, is it a school principal or will the school district need to sign off on using a school parking lot?
- ☐ Call and review the event objectives. Address all of their questions and concerns.
- ☐ Be prepared to answer questions about your recycling event who, what, when, where, why & how. Have information about events that have been done elsewhere.
- □ Check with your recycler and the site manager and then investigate additional insurance requirements for recycling electronics at the facility. No additional environmental insurance should be needed but sites may require proof of coverage or additional coverage for general liability (which covers accidental injury, damage, etc.).

Getting Permission for the Event

- If you are using a privately owned property, such as a retail parking lot, contact the property management company and the store manager.
- If you are using a facility owned by the city or county, start by contacting both the facility site manager and the Public Works department.
- If you are using a school property, contact the facilities manager and the specific school principal.

Tasks to Complete Before the Event
 Check with city and county offices – usually the Planning, Health or Public Works Department – to determine needed permits (event, sign or tent permits). Call the state environmental regulatory agency to determine if there are any additional approval steps at the state level. Some states may have specific provisions related to recycling events or to the handling of electronic products.
3. Select a Recycling Service Provider
One of the most critical decisions you will make is to pick a recycling company to perform the actual recycling of materials collected during the event. Three important considerations will help you evaluate electronics recycling service providers.
 □ Cost □ Experience □ Environmental performance
A competitive solicitation process – through a request for bids – is an excellent way to choose a cost-effective recycling option that fits your program goals and budget. A number of companies now offer comprehensive services, from the point of collecting during the event all the way through to brokering the final recycling processing and disposition of all materials.
Because of the emerging competition among these service providers, a competitive process is not only necessary to identify the company that best suits your program goals, but also to ensure that you are granting all companies the opportunity to bid for services. If you are a public organization, your organization will have procedures that dictate how to go about contracting with a private company for services.
 Steps in Selecting a Recycler ✓ Determine what services you would like the recycler to provide (labor, equipment, transportation and recycling), including any specific environmental management needs, such as domestic disassembly ✓ Solicit proposals, or bids, from companies to provide the full range of services ✓ Determine short-list based on cost, experience and environmental performance ✓ Check references and previous contracts for companies on the short list ✓ Select company that provides the best value in terms of your program goals
As you solicit bids, be sure to give the potential bidders very clear information about the population you want to serve, your expectations about service during the actual collection event, and what sort of information you need to see from them in order to properly evaluate their bids. You may choose to include a requirement that the company be responsible to recycle all cardboard, mixed paper and beverage containers discarded during the event.
Cost

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Consumer electronics recycling can be expensive, and companies that provide recycling services offer a wide array of prices. Several factors will influence the cost of your event:

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	Services are contained in the cost (labor, equipment, transportation and recycling);
	Level of competition in the area; and
	Distance to environmentally responsible recycling facilities.

Tasks to Complete Before the Event

If you negotiate, you may get recycling companies to offer different rates if they are bidding on more than just a single event. For instance, a company may offer a completely different price if the event is part of a larger package of service, such as all recycling services for your organization. The recycling cost categories described below should help you solicit bids.

Processing. How much does it cost to process the material collected? Usually, you will see processing costs on a per-pound basis, but televisions and monitors may be a per-unit cost. Specific electronic items have different processing costs, so costs should be broken down by sub-categories of equipment.

J	Computers (CPUs)
J	Televisions and computer monitors (products containing cathode ray tubes, or CRTs)
J	Office equipment
J	Cellular phones
J	Household electric products (e.g., kitchen appliances) and other low-grade material

You will see higher costs to recycle products with CRTs. In 2002, processing costs ranged from \$0.12 to \$0.90 per pound, depending on the type of material and level of processing. High proportions of televisions and low-grade material can push your costs toward the high end of the range.

Transportation costs. How much does it cost to transport collected electronics material to the processing center? If the processing facility is nearby, transportation should be an hourly rate for truck rental. Longer distances should be reported either as a flat rate or a per-mile charge. In 2002, transportation rates ranged from \$1.40 to \$2.70 per mile. Remember, it is always cheaper to ship a full truckload of material, so be sure that the truck size is right for the volume of materials you expect to collect.

Equipment and supplies. What equipment is needed to handle the program and what will it cost to acquire it? The list of equipment and supplies will include pallets, gaylords, pallet jack, forklift rental, shrink-wrap and cones. Many recyclers will provide for equipment and should itemize the added costs for equipment.

Labor. How many people does it take and at what cost to supply the service? Labor costs will vary across the country, depending on the labor market in your area. Some recycling companies will provide you with the cost per hour for each worker they will have at the event, while others will provide a flat labor charge for each day of the event. This cost an sometimes be bought down with the use of volunteers.

Case Study on Recycling Costs - Boulder County, Colorado

On average it cost \$5,000 (excluding donated services) for collection related costs and about \$0.15 per pound for processing related costs for the Boulder County events. Depending on the market you use, transportation makes up about 1/3 of the processing related costs. The size of your event will naturally affect both of these types of costs.

Source: Organizing a One-Day Computer Equipment Recycling Event: a Planning Guide, U.S. EPA Region VIII, Colorado Governor's Office on Energy Management and Conservation, EcoCycle, Inc.

Evaluating Recycling Costs Among Competing Bids

Ask for detailed cost estimates in your solicitation and you will have a much better basis for evaluating which company best meets your needs. Ask service providers to provide pricing from recent contracts for similar services.

Compare costs. Compare the bids you receive to each other and to the costs associated with other events by calling those communities that have organized events. A few communities may be reluctant to share information, but you should be able to get useful information to help you compare costs. E-Scrap News (available through www.resource-recycling.com) can help you keep tabs on the most recent events.

Experience

A growing number of companies can provide excellent service, and your evaluation should take into account the experiences of these firms. When you compare the experience of service providers available in your area, the following factors can guide your review:

Does	this	firm	have	experience	doing	what	you	want	them	to	do?

- ☐ If so, how have they performed under past contracts? If there have been problems, have they been recurring problems or were they one-time occurrences?
- ☐ If not, do they demonstrate they are capable of doing something similar?

The easiest way to answer these questions is to contact people who have worked with each service provider in the past. One useful hint is to ask each bidding company for contacts from recent, similar projects (3 to 5 should suffice), rather than simply asking for references. By doing so you can reduce the ability of the service provider to only select "good" references.

Environmental Performance

Take full responsibility for ensuring that the program you set up achieves your environmental objectives for recycling. Do not assume that the collected material is being recycled, or recycled according to your expectations.

The following questions have been used by others and will help you evaluate the environmental performance and practices of those service providers that submit bids.

Know How Your Materials Are Recycled

Recent reports have raised some important issues related to recycling old electronics. Not all processing operations ensure high standards for environmental performance, labor practices and safe disposal. These concerns make it imperative to fully understand how the material you collect will be handled.

[See www.nrc-recycle.org/resources/electronics/index.htm or www.ban.org or www.svtc.org or www.iaer.org/aboutrecycling.htm for discussion of these issues.]

	How do they process the material you collect - shred, demanufacture or export? Is there any material
	they collect that will not go through this process? Why not?
_	What and monlete do then med Is this a complete on montial list?

☐ What end-markets do they use? Is this a complete or partial list?

- ☐ What type of audits or environmental review do they do on the end-markets you use? Are there any available to read?
- □ Do they ship any whole units overseas or to brokers? Where do the brokers send the material? Can they verify the performance of all overseas markets? Ask for clear documentation on this, as this can be a red flag for poor performance.
- ☐ Have any of their customers done any audits on environmental performance? If so, are they available?
- ☐ Can they provide all licenses, certificates and permits that they operate under, in addition to contacts at the appropriate regulatory agency?
- ☐ Have they ever been cited, fined or been in violation of any environmental regulation?
- ☐ What are the residual rates from their facilities? What material is not recycled?

Electronics recycling is evolving, and those organizations that have been involved over the past several years are gaining a strong understanding of how to evaluate the environmental performance of recycling efforts. By tapping into this experience and expertise, you can help to ensure that the program you set up will achieve your particular environmental goals.

Service Contracts

Sample contract language, based on language from several existing contracts, can be found at http://www.epa.gov/epaoswer/osw/conserve/plugin/toolkit.htm. You will need to add specific contracting language necessary for your organization, but can use the sample as a base for recycler-specific requirements.

4. Consumer Education and Outreach

A successful recycling event requires an extensive effort to inform consumers about both the need to recycle and the specifics of the your collection event. The amount and type of advertising you chose to do can have a significant effect on the number of participants in your event. A variety of public education, outreach and event promotional materials have been designed for your use. Go to http://www.epa.gov/epaoswer/osw/conserve/plugin/brochure.pdf.

Provide enough information for participants to understand what they need to do.

- ☐ Event location (an easily recognizable location is best)
- ☐ Dates and times for the event
- ☐ Products accepted and NOT accepted
- ☐ Whether there are any user fees
- ☐ Contact information for more information

Inadequate information can discourage participation or inundate you with calls.

How to Tell People About Your Recycling Event

- ✓ Print, radio and television advertisements
- ✓ Announcements in local recycling newsletters (including electronic newsletters and websites), prepared by city or county recycling offices
- Special inserts in bills (water, utility or solid waste bill)
- ✓ Press releases and calls to local media to generate news reports
- ✓ Handouts at local stores and other sites, such
 as household hazardous waste collections

Advertisements in print, radio and television

Media advertising can be effective and, depending on your event budget, you may be able to use all three media. If you are interested in media advertising, early decisions about your event budget and schedule should accommodate the time and resource needs for such advertising. In addition, be sure you have the collection capacity to handle large volumes of materials if you advertise widely. Your organization will need to have media relations staff to help you secure the advertising time and space.

Making Use of Advertisements

The State of Maryland, in partnership with a Baltimore television station, produced a commercial about electronics recycling that was provided to other states and local governments to be tailored to their specific locations.

Best Buy Company generally runs print advertisements for their recycling events a week before the event and again a day or two before the events. Best Buy also created a 30-second television advertisement that could be edited to provide information on specific events.

Announcements in local recycling newsletters

If there is a recycling or waste newsletter (either print or electronic via email) in your community, this tool is inexpensive, reaches all households in a community and is a primary source for recycling information. To the extent you can plan your event on a schedule that allows you to include an announcement in a newsletter (or several, if you are trying to reach a number of communities), this approach can be your primary outreach channel.

Special inserts in other service billing statements

If you have the opportunity to include an announcement as an insert in a water, utility or solid waste bill, you can gain the same cost-effective outreach as through a recycling newsletter. Such bills are sent out most often on a quarterly basis, so your event planning would need to allow enough time to use the billing cycle for promotion.

Reaching All Residents

In Napa Valley, California, a county with about 128,000 people and few electronics recycling options, all governments in the county worked with their franchise garbage hauler and the Napa Valley Personal Computer Users Group to organize, plan and carry out two-day electronics recycling events in the summer of 2001 and 2002. The event was open to both residents AND businesses.

In addition to advertising in advance through brochures, the organizers sent all residents **a coupon for recycling electronics in their monthly garbage bill**. Participants with a coupon were not charged to drop off items at the event. Existing waste and recycling fees covered the event costs.

The events resulted in over 70 tons in 2001 and 85 tons collected for recycling in 2002. Costs for the events were about \$50,000 each, including labor, equipment, transportation, and recycling.

News media outreach to gain access to local news reporting

While unpredictable, local news coverage can give you broad exposure for a relatively small low cost. An announcement coming from a civic leader has a much better chance of gaining the attention of the local news community. Second, have a media relations person or staff that can send out a media alert and answer calls seeking more information. An example of a media alert that has been used for other events can be found at http://www.epa.gov/epaoswer/osw/conserve/plugin/media.pdf. When you contact local news outlets, invite them to come to the event for potential visual material and interviews.

Your Message Matters! Be Clear and Concise About Why People Should Recycle

As part of your outreach efforts, you should carefully develop and refine your message. If a media representative calls you, you will want to be prepared with a brief description of the event, the problems of discarded electronic products, and how people can participate. The Plug-In To eCycling Campaign materials should help you provide a clear message.

Plan to be easily accessible to the media before, during and after the event. This type of proactive outreach and positive interaction with the media can really improve the public perception of your efforts.

BE CREATIVE! Use a Variety of Outreach Methods

The following examples highlight how two counties put together outreach and promotion efforts that include a wide range of tools to reach different segments of their population. Aggressive outreach and promotion can be instrumental in gaining the visibility needed to secure community support and funding for electronics recycling programs.

Take It Back Network

Snohomish County, Washington 2002 Advertising and Promotion Materials

GENERAL PUBLIC

Publicity

- · www.co.snohomish.wa.us/takeitback
- Press release (Ban/program announcement/ participant list)

Notification/Promotion

HANDOUTS

- Brochures
- Map/Directions and other local options
- · Waste Connections newsletters
- Chamber of Commerce Fliers

SIGNAGE/DISPLAYS, ETC.

- Posters
- Counter Displays/brochure rack
- Employee buttons

Paid Advertising

- · Newspaper Advertising
- · Transit interior display advertising
- Yellow pages advertising

PARTICIPATING BUSINESSES

Communications

• Take It Back Network Breakfast Roundtable

Misc. In-Store Tools

- Electronic files of Take It Back logo art
- Window/door decals
- Banners (small: 11" x 13" and large: 3' x 3')
- Balloons
- Illegal Dumping signage (interior and exterior) and mock surveillance cameras
- Posters, Employee buttons, Counter cards with brochure holder

Collier County, Florida

Outreach and Promotions

Collier County uses many public education and outreach methods to publicize electronics recycling. The County obtained a state recycling grant to hold two free electronics recycling events. These events were held in 2001 and 2002, and collected about 18,000 pounds of electronics. Two recycling drop-off centers also provide free drop-off for residents and fee-based drop-off for businesses. The County has recycled about 70,000 pounds through these centers to date.

Collier County uses several outreach methods. They have an overall advertising budget of \$80,000.

- The website gives information on electronics recycling news and events, a photo gallery of past electronics events, and a short movie clip. See www.colliercountyrecycles.com.
- Movie Theater: They run a promotional slide on the electronics program at local movie theatres. This slide is shown four times before movies are played.
- A 24-hour hotline with information on electronics recycling.
- Brochure: The County developed a brochure that gives facts on the dangers of not recycling electronics and information on recycling in the county.
- Magnets: the County created a magnet made from recycled computer chip boards, with the logo, Electronics Recycling is the Future, and the website address and the hotline number.
- Radio and television commercials include electronics recycling in the general recycling message.
- Utility Billing: The County can advertise the electronics recycling program for free on the bottom of monthly utility bills for residents and businesses.
- Flyer to Key business sectors: A flier was distributed to Motel/Hotels to inform them that they can recycle their electronics at our drop-off locations.
- Newspaper Advertisement: Electronic Roundups are advertised with the local newspaper.



Day of the Recycling Event

1. Staffing Needs

You will need adequate staff for a successful event.

- ☐ A rough estimate is six to ten staff for an electronics event where you expect to collect about 15,000 pounds of electronics, or about 150 to 200 cars.
- ☐ Event times and days can affect how you staff an event. An event open only a few hours on a Saturday may need more workers for a short time, for example, than an event open all day for a Friday and Saturday.
- Avoid understaffing an event, which can lead to long waiting lines and participant frustration, property owner and public dissatisfaction, and increased potential for injury.
- ☐ If you are loading trucks that don't have lift gates or are gathering the collected materials on pallets before loading, you will need staff qualified to drive a forklift.

Volunteer vs. Paid staff

You should arrange for professional, paid and experienced recycling staff to carry out event manager and recycling supervisor responsibilities. Some localities have city or county staff carry out these responsibilities; others have hired private recycling firms to provide all event management and recycling activities.

Volunteer or paid staff can provide labor for unloading electronics from participants' cars, traffic management and greeting participants.

Event Staffing & Responsibilities	Paid	Volunteer
Event Manager Overall responsibility for event logistics, including set-up and take-down; relations with media, property owners and participants; day of event on-site problem-solving	1	
Recycling Supervisor Responsible for the full range of on-site collection, sorting and loading for transportation; representative of recycling service provider with decision-making authority at event	1	
Recycling Labor Lead for physically unloading participant vehicles; sorting and carrying collected materials; preparing for loading and transportation	1	1
Greeters & Traffic Management Represents event host to all participants; provides information on event; answers questions; helps direct traffic smoothly through the drop-off area; if appropriate, collects data through survey or questionnaire	1	1

- □ Some localities have determined that the time it takes to coordinate volunteers to properly staff an event and the expense of the risk associated with volunteers at an event could be better spent on event promotion and advertising, or other activities.
- Other localities have found that using volunteers enables them to afford to hold event when they otherwise wouldn't have the budget pay to staff the event.
- ☐ Some recycling service providers may express liability concerns associated with having volunteers working at an event. If you are going to have volunteers, discuss the best way to address these concerns.

Note of caution on volunteers

While many communities encourage active involvement of volunteer groups, you should use good judgment on potential volunteers for electronics recycling events. Collection events involve high levels of traffic and lifting of heavy items. These factors suggest that you consider only groups appropriate for these activities. While activities like heavy lifting may not be a good fit for all volunteers, such as school kids, there are good ways to involve these supporters. School children, for example, can do much to get the word out about your event.

Fridley, Minnesota, a suburban city outside of Minneapolis with a population of 30,000, added electronics collection to their Household Hazardous Waste Clean Up Events in 1999.

In the first year, existing city staff provided all event labor – greeting, unloading cars, loading a roll-off container. Fridley contracted with a recycler ONLY to drop off a roll-off container for electronics and the recycler then transported the load off for recycling after the event.

In 2001 and 2002, Fridley arranged for a recycler to provide all service related to electronics. They determined that the city time and budget needed to coordinate, staff and provide additional insurance for the event were offset by the cost of the full service recycler. Residents paid a portion of the recycling costs for electronic items; the City paid the rest. In 2003, the City has discontinued collections due to the program cost.

2. Equipment and Supplies

If you use a recycling service provider, they should provide most, if not all, of the equipment you will need during the event. You should specify that they provide all equipment when you solicit bids and include equipment responsibilities in your service contract.

The recycler should recommend the right size and combination of trucks, trailers, or roll-offs for an event, based on the collection site, anticipated volume of materials and transport distance to processing facilities. Make sure the recycler has a truck, trailer or roll-off in reserve. Require the recycler to bring extra pallets and gaylords, to ensure there will enough to handle larger than anticipated volumes of material.

It is important to be absolutely sure that you can handle any foreseeable volume of material.

If drop-off fees are collected from participants, have a cash box with petty cash for making change (in small bills) and a receipt book (unless you are working with a not-for-profit who will reuse the equipment, the receipts are not for tax purposes).

MAKE SURE you have a hand-counter (clicker) to keep track of number of participants.

Recycling Equipment

- ✓ Trucks & trailers range from 24foot or 39-foot straight truck to 53foot semi-trailer OR roll off containers (usually 40 yard size) depending on anticipated size of event
- Pallets & gaylords for sorting and loading
- ✓ Moving and loading equipment forklift and pallet jack
- ✓ Traffic control supplies cones, directional signs, rope, etc.
- ✓ Recycling receptacles for cardboard and mixed paper
- ✓ Trash receptacles
- ✓ Worker supplies: back braces, gloves, safety vests, first-aid kit
- ✓ Staff needs Refreshments, chairs, tables, tent for shelter, access to restrooms or portable toilets
- ✓ Clean up supplies
- ✓ A receipt book may be needed if you are a nonprofit or serving businesses

3. How to Ensure a Safe Event

Event safety is often overlooked, but essential to ensuring that the event is a success. Several important steps can help ensure that your event proceeds safely.

The event manager and recycling supervisor should have a plan for event safety in advance of the event.
Brief all event staff, paid and volunteer, in the morning before the event begins.
Have safety and first-aid equipment on site.
Avoid creating traffic flows that cross paths with pedestrian activity, both within the event site and the
surrounding area.
Keep recycling equipment contained within an area not accessible to automotive traffic.
Minimize the degree to which participants have to stop and get out of their vehicles (though you won't
be able to prevent this altogether, no matter how hard you try).
Have a plan for media outreach if you have to cancel the event due to severe weather.

Make sure you check on any insurance requirements when you get permission to hold the event. Depending on the site location, you may have had to secure general liability insurance to provide coverage in the event of any accidents that lead to injury.

4. Collection Hours for Event

All advertising and promotion materials should have included information on the hours of operation for the event. As a general rule, it is wise to avoid overlapping with rush hour if you are collecting on a normal business day.

- ☐ Best Buy Company holds electronics recycling events in parking lots of selected stores from 10:00 a.m. to 5:00 p.m. or 6:00 p.m. on Fridays and Saturdays.
- ☐ Many cities and counties hold electronics collections on weekends (as electronics only events or with hazardous waste collection days). Generally, events have been held Saturdays from 8:00 a.m. or 9:00 a.m. to hours ranging from 1:00 p.m. to 4:00 p.m.

Consider the habits of your community and what they are used to in events when setting your time. If you are advertising widely for a big turnout, you may want to have longer hours to try to spread the traffic.

Set up should begin so the event is ready to start at least a half hour before the posted start time to allow for early arrivals. Allow one hour after collection for clean up of site, including loading all material into trucks, sweeping up all trash, taking down signs or traffic controls, and ensuring that the site is left in the same condition as before the event.

5. How do you run the event?

Organization is the key to success. The event manager should create a plan for the entire event, including logistics from set-up to clean-up.

Checklist for the Event

- ✓ Schedule a walk-through of the collection site the day before the event, for the event manager, recycling supervisor and property owner – review plans for traffic flows, sorting/loading, safety, emergency contacts, equipment and supplies.
- ✓ Have printed copies of contact names and phone numbers for all people who may need to be reached during the day of the event (get cell phone numbers!).
- Have printed copies of press releases, advertising and promotion materials on hand.
- Check the weather forecast and bring clothing or other items as needed.

6. Collecting and Reporting Information

Many communities and others who organize electronics recycling events collect data on the quantity and type of material received at an event. You also will find this data critical for securing future funding and the support of the community you serve. Your recycling service provider should be a source for much of the information on materials collected, by type and quantity.

Documenting your success for those who funded the event. Data can provide a record of how many
participants you served, how much material was recycled, how much benefit to the environment resulted
from removing certain hazardous materials from waste.

- ☐ Planning for future events. Having a good record of what you recycled and the number of participants can help you plan for future events.
- Assessing the needs of your community. You can collect some qualitative information that may help you with planning your program in the future if you choose to collect data through survey information.

Measuring what you recycle

In order to meet the data needs of your funders and constituents, you may wish to insert specific data reporting requirements in your request for bids and your contract for the event. Specifically, you should ask your recycler to report:

How much	ı material w	as collected?	
How much	material w	as recycled? How	much w

- ☐ How much material was recycled? How much was waste?
- ☐ How much of each type of material was recycled (televisions and computer monitors, printers, etc.)?
- ☐ How much did it cost you to recycle each type of product recycled?

Do not rely on self-reported information to track what was brought to your event (i.e., "what did you bring today?"). Doing so will not provide the quality information you will need. Depending on how you manage the event collection itself, you or the recycler should count:

☐ How many cars/participants were served at the event.

You can get a good sample data reporting by clicking on http://www.epa.gov/epaoswer/osw/conserve/plugin/form.pdf. EPA Region III and its member states initiated an eCycling campaign in 2001. Events were held throughout the Region and participants used a uniform form for reporting results. This form is very useful and can be adopted for use by others.

Surveys: Pro and Con

Some collection programs have used participant surveys to collect additional qualitative data during recycling events. Surveys collect information on how participants heard about the event, how far they traveled to recycle, how much they are willing to pay to recycle, as well as opinions about electronics recycling issues.

Surveys can be an effective tool, but add complications to the how you carry out your event. You will need additional staff to conduct surveys, and you may need to increase the size and layout of the collection site in order to accommodate the traffic during the time it takes to complete a survey. One option to alleviate traffic problems is to hand participants a survey form to take with them, which they fill out later and mail back to you. While this can ease the concerns about how the event works, you may not get enough responses sent back to provide you with useful information.

Survey Examples Available

Minnesota, Region III eCycling and other organizations have conducted surveys as part of their events, so you may wish to rely on existing findings before including a survey in your event. Check the Minnesota Electronics Report at http://www.moea.state.mn.us/plugin/report.cfm and the eCycling survey at http://www.epa.gov/epaoswer/osw/conserve/plugin/survey.pdf.



Post-Event Tasks

1. Communication with Partners

After the event is complete, it is good to communicate with all parties involved in the event.

- ☐ Send letters to each participating organization to thank them for their cooperation and help in carrying out the event.
- ☐ Establish time frame for the recycling company to report back to you on types and quantities of material collected during the event.

2. Report to the Public

Create a report for public audiences. The public report need only include the basics, such as those outlined below. A public report will help the general public and decision makers within your organization understand what happened at the event. It can assist any organization in planning, funding requests, cost assessments and other analysis for future events.

- ☐ Brief description of program objective of the recycling event
- Dates and locations of the event
- □ Number of participants
- ☐ Types and quantities of materials collected
- ☐ Contact information for those seeking more detailed information about the event

Draft a press release publicizing the results of your event. Use the opportunity to help the public see how much waste was recycled.



Need More Information?

The following organizations have additional information on electronics recycling programs:

Setting Up and Operating Electronics Recycling/Reuse Programs: A Manual for Municipalities and Counties, Northeast Recycling Council (NERC), October 2001. www.nerc.org

Organizing a One-Day Computer Equipment Recycling Event. A Planning Guide, U.S. Environmental Protection Agency Region VIII, Colorado Governor's Office of Energy Management and Conservation, and EcoCycle, Inc., 2002. www.state.co.us/oemc

Recycling Used Electronics: Report on Minnesota's Demonstration Project, Minnesota Office of Environmental Assistance, St. Paul, July 2001. www.moea.state.mn.us

Considerations for Local Communities, Related to the Collection of Used Electronic Products, Northwest Product Stewardship Institute, http://www.productstewardship.net/PDFs/productsElectronicsCollectionConsid.pdf

Other sources of data and information referenced in the Tool Kit:

Assessment of E-Waste Collection & Processing Issues for the Metro Region, Portland Metro, June 2002.

Collection Organizations Directory, International Association of Electronics Recyclers, Albany, NY. www.iaer.org/search/iaersearch.cfm

Core Performance Elements of the Guidelines for Environmentally Sound Management of Wastes, Organisation for Economic Co-operation and Development, February, 11 2003. http://www.olis.oecd.org/olis/2001doc.nsf/linkto/ENV-EPOC-WGWPR(2001)4-FINAL

Household Hazardous Waste Management: A Manual for One-Day Community Collection Programs, U.S. EPA, 1993. www.epa.gov/epaoswer/non-hw/household/hhw/cov_toc.pdf

Electronics Industries Alliance, Arlington, Virginia, Directory of Recycling Events. www.eiae.org

National Database of Electronics Recyclers, Reuse Organization, and Municipal Programs, National Recycling Coalition. www.nrc-recycle.org

Polymer Alliance Zone, West Virginia. www.electronicsrecycling.org

Rochez, Regina, "Following the Path of eCycling" Resource Recycling, December 2002.

Selected E-Waste Diversion in California: A Baseline Study, California Integrated Waste Management Board, November 2001. www.ciwmb.ca.gov

Silicon Valley Toxics Coalition, Campaign for Responsible Technology, San Jose, California. www.svtc.org

Technical Guidance for the Environmentally Sound Management of Specific Waste Streams: Used and Scrap Personal Computers, Organisation for Economic Co-operation and Development, March 4, 2003. http://www.oecd.org (search for title)

See additional documents regarding Environmentally Sound Management of Electronics at www.oecd.org.

This tool kit was prepared by E4 Partners with funding from the U.S. EPA. E4 and U.S. EPA thank the following for sharing thoughtful comments, information, and examples.

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Joe Aho, Recycle America, Waste Management, Inc.

Best Buy Company, Inc.

Ed Boisson, Ed Boisson Associates

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Collier County, Florida, Solid Waste Management Department. www.colliercountyrecycles.com

California Integrated Waste Management Board, Sacramento, California. www.ciwmb.ca.gov

Cara Clore, Clinton County, Michigan

Susan Castellon, Colorado Governor's Office of Energy Management and Conservation

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Sego Jackson, Snohomish County, Washington

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Joe Nardone, Envirocycle, Inc.

Regina Rochez, Maryland Department of the Environment

Gloria O'Connell Sonnen, Materials Management Division, Minnesota Department of Administration

Claudette Reed, U.S. Environmental Protection Agency, Region III, Philadelphia, PA



United States Environmental Protection Agency Office of Solid Waste (5306W) Washington, DC 20460

Official Business Penalty for Private Use \$300

EPA530-R-03-005 March 2003 www.epa.gov/osw